

Swimming lessons for infants and toddlers



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Drowning is the second leading cause of unintentional injury death in Canadian children one to four years of age, accounting for more than one-fifth of deaths in this age group (1,2). Hospitalization rates for near-drowning peak in the toddler age group, with a five-fold increased risk compared with older children (2). Infant and toddler drownings tend to occur in or around the home, with infants mostly in bathtubs, and toddlers falling into swimming pools (3,4).

Swimming programs for infants as young as several months of age are widely available in Canada. These programs are designed to introduce young children to water, build water confidence, and teach water safety to parents and guardians. Few studies have examined readiness for swimming lessons in this age group. Parker and Blanksby (5) reported that children's earliest mastery of water confidence and basic aquatic locomotive skills is four years of age, despite the age at which lessons commence. Blanksby et al (6) reported that children achieved the skills necessary to perform the front crawl at 5.5 years of age, regardless of whether lessons began at two, three or four years of age.

There is evidence that swimming lessons improve swimming ability and deck behaviour in young children (two to four years of age); however, the long term maintenance of these skills has not been reported (7,8). There is no evidence that swimming lessons prevent drowning or near drowning in this age group. Although it may be possible to teach young infants basic motor skills for water, infants cannot be expected to learn the elements of water safety or to react appropriately in emergencies. No young child, particularly those who are preschool aged, can ever be considered 'water safe'. Active adult supervision and four-sided pool fencing are the best strategies against drowning in this age group (9-11). In particular, pool alarms are not effective and may give parents a false sense of security. Hazards of swimming lessons for young children other than drowning include water intoxication with hyponatremia and seizures, hypothermia, and various infectious diseases including otitis externa (12-19).

Based on the current research evidence on the effectiveness of infant and toddler aquatic programs, the Canadian Paediatric Society recommends that:

- Swimming programs for infants and toddlers less than four years of age should not be promoted as being an

effective drowning prevention strategy.

- Children less than four years of age do not have the developmental ability to master water survival skills and swim independently. Aquatic activities and swimming programs for these children should focus on building confidence and educating parents regarding water safety.
- Swimming instruction should be carried out by trained instructors in pools that comply with current standards for design, maintenance, operation, and infection control (to reduce the risk of hepatitis A, gastroenteritis, skin infections, etc.).
- Residential pools should be fenced on all four sides, and must include a self-closing, self-latching gate. Check with the local municipality for other requirements, such as height and type of fencing.
- Constant arms-length adult supervision is recommended for toddlers and infants near water (pools, bathtubs and natural bodies of water). Infants placed in water must be held by an adult at all times.
- Government-approved personal flotation devices (PFDs) should be used for all young children and those who cannot swim. PFDs are not a substitute for supervision.
- Parents and pool owners should be encouraged to receive first aid and cardiopulmonary resuscitation (CPR) training, and to maintain an emergency action plan.

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The recommendations in this statement do not indicate an exclusive course of treatment or procedure to be followed. Variations, taking into account individual circumstances, may be appropriate.